

## **REMARKS**

Applicant acknowledges receipt of the office action dated October 31, 2007, in which the Examiner objected to claims 11-14; rejected claims 1, 2, 6, 7, 9, 11, 15, 16, 17, 18, and 20 as anticipated by Yie (US 4478368), and indicated that claims 3-5, 8, 10, 12-14 and 19 would be allowable if rewritten in independent form.

Claims 1 to 20 remain pending.

Applicant agrees that claims 3-5, 8, 10, 12-14 and 19 contain allowable subject matter but has deferred placing them in independent form at this time, in view of the arguments set out below.

### **Objection to claims 11-14**

Claims 11 and 13 have each been amended to remove the word "preferably." Applicant submits that the amendments cure the grounds for the objection to these claims as indefinite.

### **Claim rejections under 35 USC 102**

Applicant respectfully submit that claim 1 as it currently stands is patentable over the art of record. Specifically, Yie does not teach an abrasive jet drilling means in which the modulation means modulates the quantity of abrasive particles in the mixture as recited in claim 1. Nothing in Yie teaches or suggests that the amount of abrasive particles in the mixture can be varied, or that such modulation would have a desired result. Thus, Yie does not disclose all of the elements of the claims.

Further, Applicant respectfully submits that Yie does not even teach an adjustable pumping means, as asserted by the Examiner. The item 109, which is cited in support of the rejection, is indeed a pump, but it does not produce a modulated flow and Yie does not teach that the operation of pump 109 is modulated or controlled in any particular way.

According to Yie, water from pump 109 enters dual fluid cylinders 106 and is pressurized for output to nozzle 10 by hydraulic fluid in cylinders 105. Significantly, Yie

expressly teaches that the flow of fluid through nozzle 10 not be modulated, as he states:

"In a preferred embodiment, the hydraulic fluid is supplied by a conventional hydraulic power source to dual pressure intensifiers which are operated in opposing synchronism to avoid pressure fluctuations at the output." (emphasis added).

Because nothing in Yie teaches or suggests modulating the quantity of abrasive particles in the mixture, Applicant respectfully submits that Yie does not anticipate claim 1, 13, 17, or the claims that depend from them.

Concluding remarks

Applicants believe that each ground for rejection raised by the Examiner in the Office Action has been addressed. Attorney respectfully submits that the specification and claims are in condition for allowance.

In the event the Examiner has any questions or issues regarding the present application, she is invited to telephone the undersigned.

Respectfully submitted,  
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